



Questions and Answers: Assessments and the Assessment Tool



Forest Resource Assessment Basics

1. What do we mean by assessment?

Assessments are conducted at different levels to inform policy decisions. Assessments at all levels (state, regional and national) should inform State and Private Forestry policy, planning and programming. The purposes for conducting assessments at each level should be distinct and complementary to other levels of assessments.

National Assessment: An assessment on a national scale using consistent data sets tiered to the three national priorities (Conserving and managing working forest landscapes; Protecting forests from threats; and Enhancing public benefits from private forests) and objectives. The assessment will be led by S&PF and State Forester leadership and supported by the Data Strategy Team.

The purposes of the National Assessment are to: 1) inform national policy, planning and programming; 2) highlight the conditions and trends of the nation's trees and forests; 3) help identify opportunities for multi-state and multi-agency investment and cooperation; and 4) communicate the importance of trees and forests. The National Assessment is *a process* to gather, analyze, and synthesize data to provide information to meet these purposes.

Information generated by the National Assessment will be driven by a set of questions tied to the State and Private Forestry Redesign priorities and objectives. That information will be displayed in a variety of formats -- including maps, graphs and charts, and narrative description. Information from the National Assessment will be available to inform or support development of other products such as: revision of State Forest Resource Assessments and Strategies; the annual "Report Card;" and policy development.

An example of a strategic question tiered to a priority and objective could be, under the priority and objective of Enhancing Public Benefits from Private Forests – Water quality and quantity is protected and enhanced: How much of the nation's municipal drinking water supply is dependent upon forested watersheds? What is the economic value of this forest-dependent drinking water? Finally, what portion of these forests are at risk to harm (conversion, insects/disease, fire, etc.)?

State Forest Resource Assessments: State Forest Resource Assessments and resource strategies are integral to the State and Private Forestry (S&PF) Redesign and required as an amendment to the Cooperative Forestry Assistance Act (CFAA), as enacted in the 2008 Farm Bill.

To ensure that federal and state resources are being focused on important landscape areas with the greatest opportunity to address shared management priorities and achieve measurable outcomes, each state and territory will work collaboratively with key partners and stakeholders to develop a statewide forest resource assessment. The state forest resource assessment should provide a comprehensive analysis of the forest-related conditions, trends, threats, and opportunities within the state.

At a minimum, state forest resource assessments will:

- Provide an analysis of present and future forest conditions, trends, and threats on all ownerships in the state using publicly available information.
- Identify forest related threats, benefits, and services consistent with the State and Private Forestry Program national priorities.

- Identify any areas or regions of that State that are a priority.
- Identify any multi-state areas that are a regional priority.
- Incorporate existing forest management plans of the State including wildlife action plans and community wildfire protection plans.

States have flexibility in the approach they use to develop their State Forest Resource Assessments. Some states are utilizing the sustainability Criteria and Indicators as a basis for their assessments. Other states are conducting stakeholder meetings to identify important issues and resource concerns. All states will be identifying priority issues and areas, using the best available data, to focus program delivery and engage with partners and stakeholders.

Regional assessments are not a formal requirement of S&PF Redesign, but can serve to focus several states and partners around shared resource concerns and large priority landscape areas. Examples include the Southern Forest Lands Assessment and other efforts.

Assessment Process and Governance

2. How can or should a state assessment inform regional and National Assessments?

As States complete their State Forest Resource Assessments and Strategies, a set of common issues at a regional or national level will likely arise. In addition, States will identify data gaps that could lead to development of regional and national data sets. This State information will be important in forming future national policy questions and objectives that then drive assessments at all levels. State level concerns can also inform the adoption of a set of core data-layer themes for assessment spatial analyses.

Ideally National Assessments are built from the ground up with regional and state input and nationally consistent data at a scale suitable for state use. This allows for the identification of multi-state areas of regional importance and even national importance. A good example of this is the recent Southern Forest Lands Assessment: <http://www.fs.fed.us/na/sap/regional-assessments/index.shtml>

3. How can or should national and regional assessments inform State Forest Resource Assessments?

The key policy questions that drive assessments at the national level, can also serve to drive assessments at the regional and state level - thus in effect, relating national priorities to a scale that can be addressed through program strategies at the state or local level. Assessments at all levels can also be linked by a set of common core data layer themes that establish a common basis for forming policy questions – and developing data. States may use nationally available data – if reliable at the appropriate scale.

National and Regional assessments can also identify opportunities for multi-state and multi-agency investment and cooperation.

Both the National Assessment and State Forest Resource Assessments are linked to the national priorities and objectives. The National Assessment may inform (rather than direct) required revision of the State Forest Resource Assessments. We also expect the National Assessment may inform the national S&PF report card. For example, the National Assessment is intended to provide information that would help identify opportunities for multi-state and multi-agency investment and cooperation. Finally, State Forest Resource Assessments may become a source of data for some National Assessment metrics.

4. What is the relationship between national, regional and state priority areas?

National, regional, and state priority areas will likely not align perfectly. This does not mean an assessment is “wrong” if the priority areas don’t match up with an assessment at another level. As stated in the first section, each level of assessment has a distinct yet complementary purpose and

priority issues can differ. National priority areas will highlight broad landscape areas for communication purposes; at the state level priority areas will drive on-the-ground delivery of S&PF programs.

In general, where priority issues differ greatly at the national and state level, there will be less relationship between priority areas. Where priority issues align, we would expect a closer relationship between priority areas across the assessment levels.

For State Forest Resource Assessments, the geospatial analysis component is intended to identify priority landscape areas across the urban to rural continuum where federally-funded cooperative forestry program outreach and activity can be emphasized and coordinated. Establishment of these priority areas is intended to enable the efficient, strategic, and focused use of limited Forest Service program resources. The identification of priority areas is important for focusing coordinated federally-funded Forest Service efforts where possible and appropriate, but is not intended to replace efforts by state forestry agencies to serve other areas of the state.

5. Are State Forest Resource Assessments intended to be “rolled up” to create a National Assessment?

No, State Forest Resource Assessments are not intended to be “rolled up” or compiled into a National Assessment. Since there is flexibility in how states conduct their state assessment, the State Forest Resource Assessments are not intended to be compiled into regional or national priority area maps for resource allocation or other purposes.

For certain policy questions, state-defined priority areas may be used for demonstrating national-level results. However, a “roll-up” of state priority areas would require standard methodology and consistent data sets.

6. What is the Data Strategy Team and how is it supporting Assessment efforts?

The S&PF Deputy Chief has designated the Data Strategy Team, composed of geospatial and program experts from the Forest Service and States, as the lead for assisting States with geospatial aspects of the State Forest Resource Assessments and Strategies. This encompasses identifying and addressing data gaps, developing a national data standard, and communication about available resources and tools. The Team is composed of two groups: one group focused on geospatial aspects and another on program support and integration of assessments with S&PF programs.

The team will assemble suitable existing geospatial data that exists at the national level, identify and address geospatial and other data gaps, and develop technically sound data analysis scenarios to address national resource management priorities and key program policy questions. Focus areas for the Data Strategy Team are:

- **State Assessments and Resource Strategies:** Serve as an immediate national resource to assist states as they develop the geospatial aspects of the Assessments and Strategies.
- **Data Strategy:** Develop a national strategy that identifies data development, maintenance, and program support needs for implementing a “redesigned” S&PF.
- **National Assessment:** Assist the Redesign Implementation Council in developing an assessment at a national scale for State & Private Forestry.

Data – In the near term the group serves as a national support network for states developing their assessments and strategies. The team is producing resources, including a [web page](#) that provides access to already existing national data sets and links to other analysis resources. In the longer term the main emphasis of the team is to culture the development of national data sets that support high quality national, regional and state resource assessments. Currently only a few spatially consistent data sets exist nationally to support these assessments, and guidelines on how states should develop their core data are needed.

Development of additional necessary data to support assessments at various scales requires substantial but necessary investments of staff and other resources if assessments are to successfully support and drive program delivery as intended by the redesign effort and the 2008 Farm Bill.

The State and Private Forestry Assessment Tool

7. What is the Assessment Tool?

A web based GIS application that provides access to a standard framework that enables the weighting and combining of geospatial layers representing the national priorities and objectives outlined in the 2008 Farm Bill. The tool provides a flexible platform to create assessments at many scales – state, regional, or national.

8. Is the Assessment Tool the same as a National Assessment?

No. These are distinct items:

1. **Assessment Tool:** As stated in the answer to Question #7 above, the tool is a web based GIS application that provides access to a standard framework that enables the weighting and combining of geospatial layers representing the national priorities and objectives.
2. **National Assessment:** Defined in the answer to Question #1 above, this is an assessment at a national scale to inform policy, highlight conditions and trends of national significance, and communicate the importance of forestry issues and landscapes to the Congress, the Administration, and national partners.

9. What scale (state, regional, or national) is the Assessment Tool useful for? Can it help support State Forest Resource Assessments?

The Assessment Tool was originally designed to support National Assessments, but can be used to support regional and State Forest Resource Assessments through the use of different data inputs. Several of the national data sets currently in the Assessment Tool are not recommended for regional and State Forest Resource Assessments because they are too coarse (it would be like trying to drive through downtown Los Angeles with a Rand McNally national road map). States and regions will have to upload finer scale data into the Assessment Tool in order to use it for their own analysis.

10. Can the Assessment Tool be used to delineate national, regional, and state priority areas? With the same data?

Yes and no. Priority areas are a product of an assessment or the question being asked. An assessment is a function of the data you use and the process you use for analysis. A change in either analytical process or data will yield different results. For example, a National Assessment and state assessment may use the same data layers in the Assessment Tool but a different set of weights yielding different priority areas. For example, in one model fire may be weighted higher than insect and disease risk, while in a different model insects and disease risk may be rated higher. Also, many of the national data sets available in the tool are too coarse for State Forest Resource Assessments, particularly for smaller states.

11. What is the analytical process used by the Assessment Tool?

A standard weighed overlay framework in which various GIS layers (factors/criteria) representing the national priorities and objects are combined. This is accomplished by:

- Assigning layers to various priorities and objectives.
- Identifying high priority areas on each layer.
- Aggregating layers by watershed, or some other unit, to produce a more generalized output and thus eliminate artifacts in the final maps.
- Weighting each layer to account for its relative importance.
- Combining the layers using a weighted linear combination by multiplying the factor weight by each layer, followed by a summation of the results.

12. Can data be uploaded into the Assessment Tool?

The tool is specifically designed for uploading of data by state staff or other individuals doing assessments. The data does have to meet a specific format (GeoTiff), however, and should follow some basic standards outlined by the Data Strategy Team, such as a standard coordinate system and cell size. Getting the data into the correct format could require a significant amount of effort by state GIS staff.

13. How will data/information/access be secured and maintained for this tool?

A tool administrator will be assigned to maintain the data sets and ensure proper maintenance of the tool. The tool will also meet stringent federal information system security standards. The tool will be required to go through a USDA Certification & Accreditation process. Several issues still need to be addressed, such as; How will staff log into the tool? Does the tool utilize some sort of e-authorization? Will there be different roles in the tool? Who has access to what information?

14. What will the output look like? What form will it be in?

Web browser accessible maps and tables are downloadable in a report format in popular formats such as PDF and Microsoft Word. The maps can also be downloaded from the system in GeoTiff (possibly Arc/Info GRID, and Imagine as well) format for use in a GIS.

15. If a state already has a high level of GIS expertise/data/tools, what will the Assessment Tool do for them?

The tool will provide a standard web accessible environment where State Forest Resource Assessments can be made available for review along with any regional and National Assessments. It also may offer an environment where consistency of analysis can be conducted. This Assessment Tool, built upon industry standard software, technically will not do much more than “off the shelf” GIS software. It will, however, provide an environment for the less GIS savvy individual to conduct a GIS analysis. Therefore, the tool will be most useful to states with limited in-house GIS capacity.

16. What will future iterations of this tool look like? What is planned down the road?

This will depend upon how the user community accepts this tool. The Assessment Tool interface and functionality will be dependent upon the needs of the user community.

17. When will the National Assessment Tool be available?

A prototype version is being tested by several state GIS program managers and members of the Data Strategy Team (July 2009) and will be available later in the summer for broader use.

18. How does this relate to the WebDET application being developed for the Forest Stewardship Program? Will these applications be able to "talk to each other?"

The [WebDET](#) application is a national web-based data entry and report writing geodatabase application designed to support the Forest Stewardship Program (FSP). The tool allows foresters and program managers to prepare stewardship plans and spatially track and display program accomplishments for FSP and other S&PF programs without the need for desktop GIS software or software expertise.

Currently, the Assessment Tool and WebDET do not “talk to each other”. Once priority area data layers are created in the Assessment Tool, there will be the potential to use them in WebDET as a base layer for tracking program accomplishments in those areas. Subsequent versions of WebDET and the Assessment Tool could make this process and the sharing of data between the tools more seamless.